

IFW

PATENT APPLICATION

Docket No. 13316/3295
(Formerly 2777/3295)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of PURI, Atul *et al.*

Application No.: 10/811,983

Filed: March 30, 2004

Group Art Unit: 2631

Examiner: To Be
Assigned

For H.264/AVC CODER INCORPORATING
RATE AND QUALITY CONTROLLER

Customer No.: 23838

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MAIL STOP AMENDMENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. PTO/SB/08, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. §1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c) before the mailing date of a first Office Action on the merits in the present application, OR (d)

before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required.

An English-language Abstract of non-English language reference 87 is attached hereto.

In references 136 and 156, the cited chapters of *Digital Multimedia Standards* and *Multimedia Systems, Standards, and Networks* are considered relevant. In order that the Examiner may note all chapters of these books, copies of the tables of contents are also enclosed. If the Examiner desires copies of any of the other chapters of these books, it is requested that he/she contact the undersigned.

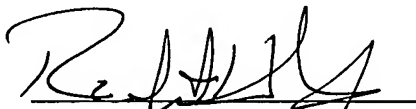
In accordance with U.S. practice, copies of the U.S. references are not included. Copies of the following references are attached:

87-100	118	133	139	145	155
105	120	134	140	147	156.
108	125-127	136	142	148	
115	130	137	143	150	

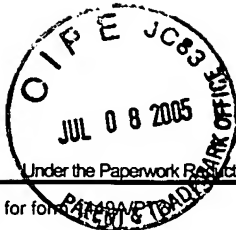
Respectfully submitted,

KENYON & KENYON

Date: July 8, 2005


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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 10

Complete if Known

Application Number	10/811,983
Filing Date	03/30/2004
First Named Inventor	PURI, Atul
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3295

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	1	US- 2,905,756	09/22/1959	Graham	
	2	US- 4,245,248	01/13/1981	Netravali <i>et al.</i>	
	3	US- 4,394,680	07/19/1983	Watanabe	
	4	US- 4,717,956	01/05/1988	Moorhead <i>et al.</i>	
	5	US- 4,920,414	04/24/1990	Remus <i>et al.</i>	
	6	US- 4,958,226	09/18/1990	Haskell <i>et al.</i>	
	7	US- 4,999,705	03/12/1991	Puri	
	8	US- 5,001,559	03/1991	Gonzales <i>et al.</i>	
	9	US- 5,086,346	02/04/1992	Fujisawa	
	10	US- 5,116,287	05/26/1992	Hironaka <i>et al.</i>	
	11	US- 5,117,283	05/26/1992	Kroos <i>et al.</i>	
	12	US- 5,134,476	07/28/1992	Aravind <i>et al.</i>	
	13	US- 5,136,659	08/04/1992	Kaneko <i>et al.</i>	
	14	US- 5,170,264	12/08/1992	Saito <i>et al.</i>	
	15	US- 5,189,526	02/23/1993	Sasson	
	16	US- 5,194,941	03/16/1993	Grimaldi <i>et al.</i>	
	17	US- 5,196,933	03/1993	Henot	
	18	US- 5,214,507	05/25/1993	Aravind <i>et al.</i>	
	18	US- 5,214,721	05/25/1993	Fukuhara <i>et al.</i>	
	20	US- 5,227,878	07/13/1993	Puri <i>et al.</i>	
	21	US- 5,247,590	09/21/1993	Fukuhara <i>et al.</i>	
	22	US- 5,253,055	10/12/1993	Civanlar <i>et al.</i>	
	23	US- 5,253,056	10/12/1993	Puri <i>et al.</i>	
	24	US- 5,270,813	12/14/1993	Puri <i>et al.</i>	
	25	US- 5,278,646	06/11/1994	Civanlar	
	26	US- 5,345,317	09/06/1994	Katsuno <i>et al.</i>	
	27	US- 5,408,328	04/18/1995	Boliek <i>et al.</i>	
	28	US- 5,414,469	03/09/1995	Gonzales <i>et al.</i>	
	29	US- 5,436,985	07/25/1995	Li	
	30	US- 5,454,051	09/26/1995	Smith	
	31	US- 5,465,119	11/07/1995	Demos	
	32	US- 5,467,136	11/14/1995	Odaka <i>et al.</i>	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 2 of 10

Complete if Known

Application Number	10/811,983
Filing Date	03/30/2004
First Named Inventor	PURI, Atul
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3295

U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
	33	US- 5,473,376	12/05/1995	Auyeung	
	34	US- 5,488,418	01/30/1996	Mishima <i>et al.</i>	
	35	US- 5,493,513	02/20/1996	Keith <i>et al.</i>	
	36	US- 5,500,678	03/19/1996	Puri	
	37	US- 5,524,024	06/04/1996	Lin	
	38	US- 5,532,747	07/02/1996	Yoon <i>et al.</i>	
	39	US- 5,539,468	07/23/1996	Suzuki <i>et al.</i>	
	40	US- 5,561,477	10/01/1996	Polit	
	41	US- 5,566,002	10/15/1996	Shikakura	
	42	US- 5,592,569	01/07/1997	Li	
	43	US- 5,600,375	4/1997	Wickstrom	
	44	US- 5,619,591	04/08/1997	Tsang <i>et al.</i>	
	45	US- 5,659,490	08/19/1997	Imamura	
	46	US- 5,633,684	05/27/1997	Teranishi <i>et al.</i>	
	47	US- 5,699,117	12/16/1997	Uramoto <i>et al.</i>	
	48	US- 5,737,022	04/07/1998	Yamaguchi <i>et al.</i>	
	49	US- 5,748,789	05/05/1998	Lee <i>et al.</i>	
	50	US- 5,757,969	05/26/1998	Kim	
	51	US- 5,757,971	05/26/1998	Kim	
	52	US- 5,764,374	06/09/1998	Seroussi <i>et al.</i>	
	53	US- 5,764,805	06/09/1998	Martuci <i>et al.</i>	
	54	US- 5,778,097	07/07/1998	Nickerson	
	55	US- 5,781,665	07/19/1998	Cullen <i>et al.</i>	
	56	US- 5,786,855	07/28/1998	Chen <i>et al.</i>	
	57	US- 5,790,695	08/16/1998	Suwa	
	58	US- 5,812,197	09/22/1998	Chan <i>et al.</i>	
	59	US- 5,818,532	10/06/1998	Malladi <i>et al.</i>	
	60	US- 5,832,115	11/16/1998	Rosenberg	

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STATEMENT BY APPLICANT**

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Sheet 3 of 10

Complete if Known

Application Number	10/811,983
Filing Date	03/30/2004
First Named Inventor	PURI, Atul
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3295

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	61	US- 5,835,149	11/10/1998	Astle	
	62	US- 5,850,294	12/18/1998	Aposolopoulos <i>et al.</i>	
	63	US- 5,852,473	12/22/1998	Horne <i>et al.</i>	
	64	US- 5,852,682	12/22/1998	Kim	
	65	US- 5,859,921	01/12/1999	Suzuki	
	66	US- 5,881,180	03/09/1999	Chang <i>et al.</i>	
	67	US- 5,883,981	03/16/1999	Li <i>et al.</i>	
	68	US- 5,912,991	06/15/1999	Jeon <i>et al.</i>	
	69	US- 5,963,257	10/05/1999	Katata <i>et al.</i>	
	70	US- 5,966,468	10/12/1999	Fujimoto	
	71	US- 5,974,172	10/26/1999	Chen	
	72	US- 5,974,184	10/26/1999	Eifrig <i>et al.</i>	
	73	US- 5,978,509	11/02/1999	Nachtergaele <i>et al.</i>	
	74	US- 5,978,510	11/02/1999	Chung <i>et al.</i>	
	75	US- 5,999,189	12/07/1999	Kajiya <i>et al.</i>	
	76	US- 5,999,219	12/07/1999	Boon	
	77	US- 6,005,980	12/21/1999	Eifrig <i>et al.</i>	
	78	US- 6,026,183	02/15/2000	Talluri <i>et al.</i>	
	79	US- 6,055,623	12/21/1999	Takahashi <i>et al.</i>	
	80	US- 6,057,884	05/02/2000	Chen <i>et al.</i>	
	81	US- 6,097,842	08/01/2000	Suzuki <i>et al.</i>	
	82	US- 6,141,442	10/31/2000	Chen	
	83	US- 6,148,026	11/14/2000	Puri <i>et al.</i>	
	84	US- 6,208,693	03/27/2001	Chen <i>et al.</i>	
	85	US- 6,233,356	05/15/2001	Haskell <i>et al.</i>	
	86	US- 6,459,732	10/01/2002	Chen <i>et al.</i>	

Examiner Signature		Date Considered	
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 4 of 10

Complete if Known

Application Number	10/811,983
Filing Date	03/30/2004
First Named Inventor	PURI, Atul
Art Unit	2631
Examiner Name	to be assigned
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	87	EP 0 283 715 A2	09/28/1988	ANT Nachrichtentechnik GmbH		Abs.
	88	EP 0 400 756 A2	12/05/1990	N.V. Philips' Gloeilampenfabrieken Groenewoudseweg		
	89	EP 0 422 404 A2	04/17/1991	International Business Machines Corporation		
	90	EP 0 514 663 A2	11/25/1992	International Business Machines Corporation		
	91	EP 0 517 256 A2	12/09/1992	Sony Corporation		
	92	EP 0 534 350	03/31/1993	Matsushita Electric Industrial Co., Ltd (JP)		
	93	EP 0 540 961 A2	05/12/1993	International Business Machines Corporation		
	94	EP 0 566 219 A2	10/20/1993	Canon Kabushiki Kaisha		
	95	EP 0 582 819 A2	02/16/1994	Sony Corporation		
	96	WO 94/27252 A	11/24/1994	Competitive Technologies, Inc.		
	97	EP 0 746 159 A2	12/12/1996	Matsushita Electric Industrial Co., Ltd.		
	98	EP 0 753 970 A2	01/15/1997	Sharp Kabushiki Kaisha		
	99	CA 2,168,641	03/28/2000	Kabushiki Kaisha Toshiba, JP		

Examiner
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Sheet 5 of 10

Complete if Known

Application Number	10/811,983
Filing Date	03/30/2004
First Named Inventor	PURI, Atul
Art Unit	2631
Examiner Name	to be assigned
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	100	CHEN, T., MPEG4 Video Verification Model VM 5.0, pages 2-192
	101	FUKINUKI, T.; "Measurement of Movement and Velocity of Moving Objects with Picture Signals"; IE78-67; pages 35-41; Central Research Laboratory; Hitachi, Ltd.; Kokubunji, Tokyo, Japan, 185; and English translation
	102	KOGA, T. et al.; "Motion-Compensated Interframe Coding for Video Conferencing"; IE81-54; pages 85-90, C&C Systems Research Laboratories; Nippon Electric Co., Ltd; and English translation
	103	NONOMIYA, Y.; "Motion Correction for Interframe Coding Systems," IE78-6; pages 1-10; General Technology Research Institute; Nippon Broadcasting Association; and English translation
	104	Web site material, "MPEG-4: A Flexible Coding Standard for the Emerging Mobile Multimedia Applications," http://www.tnt.uni-hannover.de/project/eu/momusys/docs/Paper/IST/pimrc/pimrc.html
	105	COHEN et al., "Adaptive Differential Coding of Picture Signals Based on Local Contour Prediction," Communications and Knowledge, Partners in Progress, November 29, 30 - December 1, 1976, Dallas, Texas
	106	PLOYSONGSANG, A. et al., "DCT/DPCM Processing of NTSC Composite Video Signal," IEEE Transactions On Communications, vol. COM-30, no. 3, pp. 541-549, XP002062314, ISSN: 0090-6778, 1 March 1982 (1982-03-01)
	107	CHAM et al., "DC Coefficient Restoration in Transform Image Coding," IEE Proceedings, Vol. 131, Pt. F, No. 7, pages 709 - 713, December 1984
	108	SEE et al., "Efficient Encoding of DC Coefficients in Transform Coding of Images Using JPEG Scheme," Signal Image and Video Processing, Vol. 1, No. Symp. 24, published 11/06/1991, Institute of Electrical and Electronics Engineers, June 11-14, 1991, pages 404-407, Singapore
	109	KIM, J. W. et al., "A Transform Domain Classified Vector Quantizer for Image Coding," IEEE Transactions on Circuit and Systems for Video Technology, pp. 3-14, XP002115624, March 1992 (1992-03)
	110	PURI, A., "Invited address: Video Coding Using the MPEG-1 Compression Standard," AT&T Bell Labs, Holmdel, NJ, 1992 SID Int'l. Symposium Digest of Technical Papers, Society for Information Display, Playa del Rey, CA, May 1992
	111	DE NATALE, F. G. B. et al.: "Adaptive DCT For Image-Data Compression," European Transactions on Telecommunications and Related Technologies, vol. 3, no. 4, pp. 359-366, XP000310681, ISSN: 1120-3862, 1 July 1992 (1992-07-01)

Examiner
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Sheet 6 of 10

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NON PATENT LITERATURE DOCUMENTS

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	112	KOK, C. W. <i>et al.</i> : "Image Coding Using DCT of Wavelet Coefficients," Proceedings of the IEEE-SP International Symposium Time-Frequency and Time-Scale Analysis (CT. No. 92TH0478-8), pp. 475-478, XP002115625 1992, NY, NY, IEEE, USA ISBN: 0-7803-0805, Victoria, BC, Canada, 4-6 Oct. 1992
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Sheet 7 of 10

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Application Number	10/811,983
Filing Date	03/30/2004
First Named Inventor	PURI, Atul
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3295

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Filing Date	03/30/2004
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Art Unit	2631
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